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Real, Suite D, 2nd floor, Menlo Park, CA 94027 (US).(72) Inventor: KAPOOR, Sanjay; 475 Cumulus Avenue, #32,
Sunnyvale, CA 94087 (US).(74) Agents: VAUGHAN, Daniel et al.; Park & Vaughan LLP,
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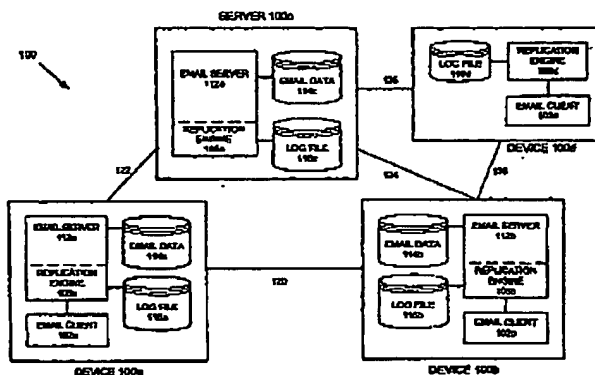
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(54) Title: SYNCHRONIZING DATA AMONG MULTIPLE DEVICES IN A PEER-TO-PEER ENVIRONMENT



(57) Abstract: A system for synchronizing data in a peer-to-peer environment includes multiple computing devices sharing a set of data. Each device includes a replication module for logging and trading data changes with other devices. A device having sufficient resources may also include a local version of the shared data and an application server that allows access to the data even while the device is disconnected from other devices. The replication module logs a description of each operation that alters the data. When one device is connected to a second device in the system to synchronize data, the devices' replication modules exchange log entries. For example, one device receives from a second device data changes made by the second device and other devices that already synchronized with the second device. Thus, the method of data synchronization is transitive and allows a device to fully update its local copy of the shared data by connecting to just one other device, which may or may not be a central server.

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